AUSTRALIAN SOCIETY FOR LIMNOLOGY

NEWSLETTER

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Australian Society for Limnology

Office-Bearers - 1988/89

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Australian Society for Limnology Newsletter

Volume 27 Number 2 May 1989

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Material for publication in the August issue of the Newsletter should be sent to the Editor before 21 st July 1989.

Fax (09) 332 2507. Long articles would be appreciatively received in any one of the following three modes: as camera-ready laser printed copy (New York, 12pt, fully justified), as formatted text on Macintosh disc, or as unformatted text on IBM or IBM compatible discs.

The Australian Society for Limnology is an association of over 400 people with professional or amateur interests related to Australian inland waters. Since its inception in 1961, the Society has played an important role in fostering limnology in this country. The ASL promotes liaison between limnologists in academic, private and governmental institutions and has a vested interest in the conservation of aquatic and related resources. Annual conferences are held near centres of limnological interest, and the programme includes scientific sessions, field excursions and social activities.

The ASL produces a newsletter with notes on activities, articles of general interest, book reviews and conference announcements; a Bulletin of original scientific papers and occasional Special Publications. A further publication is the Directory of Australian Limnologists.

Membership details

Membership applications are welcome; five classes of subscribing membership are available:

Ordinary Members:	$20.00
Student Members:	$10.00
Life Members:	$200.00
Institutional Members:	Fees on application
Sustaining Members:	Fees on application

Membership subscriptions cover the period from 1 July to 30 June and members receive all publications. Members may also choose to receive the Australian Journal of Marine and Freshwater Research, the Australian Journal of Zoology and/or the Australian Journal of Botany at reduced rates. The subscription period for each journal is the calendar year following the year in which the subscription is paid.

Enquiries relating to membership should be directed to:

Mrs M. Hart
Treasurer/Membership Officer ASL
22 Netherby Avenue
Mulgrave Vic. 3170
(03) 560 4406

EDITORIAL

This newsletter will arrive on your desk shortly before the July Congress and hopefully after you have read this edition from cover to cover you will be inspired to catch up with your limnological colleagues in Canberra - whether it be for serious discussion or to tell them how dreadful their poetry is etc.

The updates on both the Canberra and Jabiru conferences are essential reading and one feature in this newsletter that you really shouldn't miss is the revised ASL constitution. It is remarkably easy to read because it is written in plain English (or Orstraylian) not legalese. You will be asked to vote on the proposed changes at the Canberra AGM so it is important that you know what they are! Thanks are due to Richard Marchant for preparing the revised constitution and for arranging for the Society to become incorporated.

Finally, don't be fooled by the fact that I have written this editorial - the hard work needed to produce this issue has all been undertaken by Fiona Whittles, whilst I have just breezed in from leave to type a sentence or two. Many thanks Fiona.

See you in Canberra

Jenny Davis.

REVISED CONSTITUTION OF THE AUSTRALIAN SOCIETY FOR LIMNOLOGY

A revised version of the constitution of the ASL is required so that the Society can become incorporated in Victoria. What follows is a revised version of the constitution with the proposed changes marked with an asterisk *. Members of the Society will be asked to vote on the acceptance of those changes at the annual general meeting at the congress in Canberra in July. Such notification of proposed changes is required by the constitution.

R. Marchant, Secretary 21 April 1989

The Australian Society for Limnology Incorporated

CONSTITUTION

*1. NAME
The name of the Society shall be the Australian Society for Limnology Incorporated.

2. OBJECTIVES
The objectives of the Society shall be to establish effective liaison between persons interested in any aspect of fresh and brackish water research in Australia and to encourage these interests and promote their study in State and Commonwealth Research Institutes and Departments, and Educational Institutions.

3. MEANS OF ATTAINING OBJECTIVES
The following means may be used to attain the objectives of the Society:

(a) The establishment and maintenance of a register of all persons working in fields relevant to limnology in Australia and adjoining countries, giving details of their current interests.
(b) The holding of an Annual Congress which will coincide with the Annual General Meeting.
(c) The production of a Newsletter (which shall be distributed to all Financial Members and all Honorary and Sustaining Members) by an Editor to be appointed by the Executive Committee.
(d) The publication of any scientific or other information relevant to the objectives of the Society. Scientific material shall, before publication by the Society, be considered and approved by an Editorial Board of at least two members appointed annually by the Executive Committee.

(e) The encouragement of interest in limnology and support for the Society by the granting of awards and by recognition of supporters through special categories of membership.

4. MEMBERSHIP

(a) The members of the Society shall be:

(1) Ordinary Members who shall be persons admitted to membership by the Executive Committee, who shall pay such annual subscriptions as shall be fixed from time to time.
(2) Student Members who shall be university undergraduates or scholars at any educational institution, who shall pay such annual subscription as shall be fixed from time to time.
(3) Life Members who shall be persons admitted to membership by the Executive Committee and who shall pay a fee set at the Annual General Meeting.
(4) Honorary Members who may be elected for a limited specific period by the Executive Committee.
(5) Honorary Life Members who may be appointed at an Annual General Meeting on the recommendation of the Executive Committee.
(6) Sustaining Members who may be individuals, companies or organisations, admitted as such by the Executive Committee, in accordance with the following requirements, and have the privileges indicated below:

(i) Any individual, company or organisation contributing the sum of $50.00 or more in any one year shall be eligible for admission as a Sustaining Member.
(ii) Sustaining Members who are companies or organisations shall have the right to nominate two persons who shall enjoy all the privileges of Ordinary Members, including the right to vote, but not to hold office, while Sustaining Membership is current.
(iii) Sustaining Members shall be acknowledged in all official publications of the Society for a period of twelve months from the date of their contribution, and in any other manner as the Executive Committee may from time to time decide.

7)(a) the Executive Committee may, in its absolute discretion, refuse admittance to any classification of membership and shall be under no obligation to give any reason for its decision not to accept any candidate for membership.

(b) Affiliated Bodies, Incorporated or Unincorporated Bodies and other organisations approved by the Committee may become

affiliated with the Society on acceptance by the Executive Committee and on payment of such annual subscription as may be fixed from time to time.

(c) A register of Members and Affiliated Bodies shall be kept by the Treasurer/Membership Officer.

5. VOTING

Each Ordinary and Student Member and each of the nominees of Sustaining Members shall be entitled to one vote at a General Meeting or in a postal ballot and each Affiliated Body shall have the right to appoint a delegate who shall be entitled to one vote at a General Meeting or in a postal ballot. Honorary Members shall not have the right to vote. All votes shall be cast personally and not by proxy.

6. ANNUAL SUBSCRIPTION

The Annual Subscription shall be due on 1 July in each year and the amount shall be fixed at the preceding Annual General Meeting. Members whose subscriptions are not paid by the succeeding 31 December shall be unfinancial and shall forfeit all rights and privileges of membership forthwith.

7. RIGHTS OF MEMBERS

All financial members are entitled to receive current issues of the Society's Newsletter, scientific and other publications free of charge, and to attend all general meetings of the Society.

8. MANAGEMENT

The Society shall be managed by an Executive Committee consisting of the President, the immediate Past President (ex officio), the Vice-President, the Secretary, and the Treasurer/Membership Officer, together with not less than five and no more than eight other Committee Members, all of whom shall be elected at the Annual General Meeting. The position of Secretary and Treasurer/Membership Officer may be held by the one person. This Executive Committee shall implement the Society's general business, and a simple majority shall decide all questions at Executive Committee Meetings. If voting is equal, a motion is lost. A quorum at Executive Committee Meetings shall be four.

9. FINANCE

The financial year of the Society shall cover the period from 1 May in any year to 30 April in the next ensuing year.

(a) All funds received by the Society shall be banked in the name of the Society. Separate accounts may be established for specific purposes at the discretion of the Executive Committee.

(b) All bills or accounts shall be certified as to their correctness by the Treasurer/Membership Officer and shall be paid by cheque. All cheques shall be signed by any two of the President, Vice-President, Secretary, and Treasurer/Membership Officer.

(c) No bill or account shall be paid without the prior approval of the Executive Committee, which approval may be obtained at a meeting of the Committee or by mail. Expenditure of a general nature may be approved in advance during any one financial year. Any commitment to expenditure entered into by the Executive Committee which has not been paid by the date of the Annual General Meeting shall be drawn to the attention of the Annual General Meeting in the Financial Statement together with any amounts owing to the Society.

10. GENERAL MEETINGS OF THE SOCIETY

The Annual General Meeting shall determine the date and place for the next Annual General Meeting. A Special General Meeting may be called at the discretion of the Executive Committee and shall be summoned as soon as practicable following receipt of a request to do so signed by not less than twenty (20) members entitled to vote. Special General Meetings shall be called by notice in writing, specifying the business to be considered, and notices must be posted to all Financial Members not less than fourteen (14) days prior to the proposed date. No business shall be conducted at any Special General Meeting other than that specified in the notice convening the Meeting.

11. QUORUM FOR GENERAL MEETING

At all General Meetings, twenty (20) or one half of members entitled to vote, whichever is less, shall constitute a quorum, and a simple majority shall carry a motion.

12. ANNUAL REPORTS

An Annual Report and Financial Statement shall be submitted to the Annual General Meeting, and the Financial Statement shall be audited by a person appointed at the previous Annual General Meeting. In the event that the Annual General Meeting is held prior to the end of the financial year, a separate Financial Statement covering the period of the financial year shall be prepared by the Treasurer/Membership Officer and the Auditor shall certify as to its correctness. Such audited report shall then be published in the

Newsletter, or otherwise distributed to members as soon as practicable after the close of the financial year.

13. AMENDMENTS TO THE CONSTITUTION

Amendments may be made to the constitution of the Society at an Annual General Meeting, or at a Special General Meeting, or by a postal vote. Any proposed amendments shall be submitted in writing over the signature of any two members of the Executive Committee which shall either:

(a) refer them for consideration at the next ensuing Annual General Meeting, or

(b) call a Special General Meeting, for the purpose of considering the proposed amendments, or

(c) conduct a postal ballot of all Financial Members.

*A proposed amendment shall be carried by a 3/4 majority of votes poled. At least three weeks notice shall be given to all members by the Executive Committee of any proposed change to the constitution. Any amendments or alterations to the constitution and the objectives of the Society shall be made in accordance with the Associations Incorporation Act 1981.

*14. SEAL

(a) The common seal of the Society shall be kept in the custody of the Secretary.

(b) The common seal of the Society shall not be affixed to any instrument except by the authority of the Executive Committee and the affixing of the common seal shall be attested by the signature of two members of the Executive Committee.

15. CUSTODY OF RECORDS

Except as otherwise provided in this constitution all resources, books, documents, securities and documentations of the Society shall be kept at the Society, and shall be available for inspection by the members.

16. WINDING-UP OF SOCIETY

The Society shall not be wound up except:

(a) on a two-thirds vote in favour of doing so at an Annual General Meeting or at a Special General Meeting called for this purpose, and

in either case at least two week's notice of the proposal shall have been given to all Financial Members, or

(b) in the event of membership being less than five persons.

The last General Meeting shall decide how the assets of the Society shall be disposed of but this must be done in accordance with the aims of the Society and Individual Members shall not receive any benefit.

The plankton lobby

ASL CONFERENCE, CANBERRA 7-9 JULY 1989

News Update

1. Student Residence Accomodation at $22 a Night Not Including Breakfast . As a result of confusion which arose during the booking of accomodation for the conference a continental breakfast will be available from the College refectory for $6. We apologise for any inconvenience that this will have caused for those booking accomodation. Additional nights may be booked at $28 including continental breakfast.

2. Registrations. Quite a few registrations, and some abstracts have already come in and we are expecting a good role up.

3. Tee Shirts. An interesting design has been created and these will be printed before the conference for those who order and pay for them by 23 June 1989.

4. Duration of Oral Presentations. There has been some negative feedback on the limit of 15 minutes for the oral presentations at the conference. At present this limit of 15 minutes still stands but it may be extended dependent on the number of papers that are to be presented.

AN INFORMAL MEAL, PROBABLY A BARBECUE, IS PLANNED FOR SUNDAY EVENING AT $10.00 FOR FOOD AND DRINKS TO BE PAID FOR ON THE NIGHT.

TEE SHIRTS ARE ALSO BEING PRINTED FOR THE OCCASION WITH THE RATHER INTERESTING LOGO SHOWN BELOW. WE ARE ONLY PRINTING FOR THOSE WHO ORDER AND PAY BEFORE THE CONFERENCE AND THEY WILL BE AVAILABLE AT REGISTRATION.

"BUG BUSTING" CANBERRA 1989

28TH ANNUAL CONGRESS

I WOULD LIKE A TEE SHIRT	SMALL	---
	MEDIUM	---
	LARGE	---
		COST $20.00 ------
SUNDAY NIGHT BARBECUE $10.00		------
CONTINENTAL BREAKFASTS IF STAYING IN COLLEGE RESIDENCES	FRIDAY $6.00	------
	SATURDAY $6.00	------
	SUNDAY $6.00	------
	MONDAY $6.00	------
		TOTAL BREAKFASTS ------
		TOTAL PAID, TEE SHIRT, BARBECUE, BREAKFASTS ------

PLEASE TEAR OFF BELOW THE DOTTED LINE AND RETURN TO:

ASL CONFERENCE
WATER RESEARCH CENTRE
CANBERRA COLLEGE OF ADVANCED EDUCATION
P.O. BOX 1 BELCONNEN
ACT 2616.

MINUTES OF THE ANNUAL GENERAL MEETING OF THE AUSTRALIAN SOCIETY FOR LIMNOLOGY HELD AT MAGNETIC ISLAND, QUEENSLAND ON 15 MAY 1988

The meeting started at 5.45pm.

In the Chair - The President, Terry Hillman.

1. The agenda was accepted on the motion of I. Campbell, seconded M. Finlayson.

2. Apologies were received from R. Taaffe, W. Williams, B. Timms, P. Osborne, R. Buckney, L. Lloyd, M. Birch, M. Barson, J. Powling, R. Marchant.

3. The minutes of the last AGM were accepted on the motion of T. Doeg, seconded S. Bunn.

4. Matters arising from the minutes:

a. R. Marchant has investigated the incorporation of ASL as a limited liability company or the provision of adequate insurance. Both possibilities cost about the same. The matter will be decided by the incoming executive.

5. President's report: acceptance moved D. Mitchell, seconded B. Hart.

6. Secretary's report: acceptance moved R. Norris, seconded J. Hughes.

7. Auditor's report:

This year's report was not prepared by I. Hiscock due to ill health.

T. Hillman moved that a letter of thanks be sent to I. Hiscock thanking him for all the work he has done as auditor of the past few years and wishing him well. The motion was seconded by B. Hart.

The auditors report was prepared by Coles and Coster. I. Campbell moved the report be accepted, seconded R. Norris.

8. Bulletin Editors report:

Six papers have been accepted and these will constitute the next volume. Due to a new method of production this volume should be

out soon. S. Lake suggested the Executive look to appointing a new Bulletin editor as he and D. Morton did not have time to produce further volumes. M. Hart moved acceptance of this report, seconded J. Hughes.

9. Newsletter Editors report:

J. Davis reported that despite the loss of L. Barmuta as joint editor she hoped to continue the newsletter in its current vein. She requested more material and hoped that people asked to write for State and Territory Affairs would do so without prompting. D. Holloway moved acceptance of this report, seconded M. Hart.

10. Jolly Award Committee report:

B. Hart had acted as secretary of this committee and recommended that he remain in this position so that records be kept together in one place, despite the constant change of committee members. He then presented his report:

11. Student Award Committee report (by I. Campbell):

The standard of student talks was considered very high this year. The award was presented to Premek Hamr.

12. Student Travel Subsidy Committee report (by T. Hillman):

Firstly it was pointed out that two application dates had been printed and an apology was given to anybody unable to attend as a result.

13. Door Prize Committee Report:

T. Doeg announced that due to the lasting impression left by David Mitchell Scienceman at the last congress, that the door prize should be renamed the David Mitchell Scienceman Memorial (the accuracy of this is unknown) Door Prize, abbreviated to D.M. Scienceman to prevent confusion with a member of this Society. This year's award was presented to I. Campbell and R. Pearson in recognition of their services to proof reading and the anti-bicentennial campaign by holding the conference last year.

14. R. Norris reported that organisation for next year's conference in Canberra was proceeding well. The conference will probably be held on the 8th and 9th of July. He suggested that to reduce the number of concurrent sessions that poster sessions be offered. It was

suggested that the conference also extend over three days. This was agreed to by those present.

1990 Congress. S. Lake suggested Melbourne and M. Finlayson recommended Jabiru. Jabiru was favoured by those present with a vote of 37 to 3. This will be considered by the incoming executive, together with venues for later conferences.

15. Election of the executive. The following were elected unopposed:

President: J. Davis (WA)

Vice-President: R. Oliver (NSW)

Secretary: R. Marchant (Vic)

Treasurer/Membership Officer: M. Hart (Vic)

Executive
1. R. Norris (ACT)
2. S. Bunn (Qld)
3. A. Boulton (SA)
4. M. Finlayson (NT)
5. T. Wrigley (WA)
6. T. Doeg (Vic)
7. P. Horwitz (Tas)
8. J. Harris (NSW)

16. M. Hart moved that the firm of Coles and Coster be appointed as auditors, seconded I. Campbell. This should cost around $150.

17. General Business:

(a) A letter was received from B. Dussart who has just retired after 40 years in Limnology and was resigning from ASL.

(b) the plaque prepared by this Society for presentation to Lou Bennett in recognition of his work as Editor of the Australian Journal of Marine and Freshwater Research was shown and will be presented to him in an appropriate manner.

(c) Ann Grant who is currently acting as editor of AJMFR told of the enormous difficulties faced by herself and other editorial staff in the past months and the resultant delays in publication. Whilst some of the problems have been resolved, enabling publication of three issues of AJMFR, in the near future help is still needed. She suggested review articles, particularly comparing Australian

Limnology with that of other geographical areas, would be of benefit to both the journal and the Society.

(d) D. Mitchell moved that this Society recognises the importance to ASL and the international merit of AJMFR and confirms the Society's strong support for the continuation of the journal. Seconded J. Davis, unanimous.

(e) D. Mitchell moved that we record our gratitude to Ann Grant for dealing with the extreme difficulties facing AJMFR so very well and welcome her as the new editor. Seconded M. Hart, unanimous.

(f) I. Campbell moved that an honorarium of $500 be paid to M. Hart in recognition of the work she has done as treasurer and membership officer. Seconded J. Davis.

(g) B. Hart thanked T. Hillman very much for his presidency.

The meeting closed at 7.35pm.

29TH ANNUAL CONGRESS AND SYMPOSIUM
19-23 APRIL 1990 : JABIRU

TRAVEL GRANTS

Following generous financial support from the Office of the Supervising Scientist and Ranger Uranium Mine, the organising committee will be offering up to 20 honoraria (of $300 each) to assist delegates to attend the 1990 Congress and Symposium.

Applications for the honoraria will be invited during early February 1990 (i.e. two months before the Congress).

The following guidelines will apply for the granting of the honoraria:-

1. Applicant must be a current financial member of ASL.
2. Applicant must not already be receiving financial assistance.
3. Preference will be given to applicants based on proven financial need.
4. Applicants will need to provide details of their current employment or student status.
5. Applicants will need to supply an informative abstract of a talk of relevance to the OSS programme or RUM water management (see notice in this Newsletter).
6. Selection of recipients of honoraria will be solely the responsibility of the Congress Organising Committee based at ARRRI.
7. Payment of the honoraria will be made following proof of attendance at the Congress and Symposium.

ALLIGATOR RIVERS REGION RESEARCH INSTITUTE
RESEARCH OBJECTIVES

(Taken from the 1987-88 ARRRI Annual Research Summary)

Please consider these objectives if you propose submitting an application for a travel grant to attend and present a talk at the Jabiru Congress in April 1990.

Program objectives: Assessment of the environmental consequences of mining operations in such a complex region, and the development of measures for their control requires scientific and technical information from a variety of sources. A multi-disciplinary research program has been established, components of which currently

include aquatic biology, environmental radioactivity, environmental modelling, environmental chemistry, plant ecology and geomorphology. The program objectives of each of these groups are described below.

Aquatic biology
-Biological monitoring: to develop techniques and procedures to monitor and assess the effects of mining and milling on the aquatic ecosystems of the Alligator Rivers Region.
-Biological testing: to develop prospective methods of assessing the toxic risks of mine waste water to aquatic organisms in order to specify safe dilutions of these waters for discharge into streams.

Environmental radioactivity
-To identify and evaluate via field measurements, experimentation and modelling, the pathways and mechanisms by which radionuclides from uranium mines in the Alligator Rivers Region impact on humans.

Environmental modelling
-To develop mathematical models of the various processes and systems that determine the impact of mining operations on the environment, in order to predict, and to develop measures for the control of these impacts, both in the short and long term.

Environmental chemistry
-To investigate the natural distribution and form of chemical elements and compounds which may be introduced into the environment as a result of mining activity; and to identify and evaluate chemical interactions between chemicals released by mining activities and abiotic components of the environment that could have significant adverse effects on biological systems.

Plant ecology
To document and assess the chemical and ecological role of plants in wetlands that could be affected by uranium mining and to devise strategies for revegetation of decommissioned mine sites.

Geomorphology
To identify and quantify geomorphological processes relevant to the siting and engineering design of tailings impoundments and other stabilised earth and rock structures in order to minimise the long-term impact on the environment.

FAREWELL TO MAX FINLAYSON

Some readers of the ASL Newsletter Vol 27(i) will be aware that I am soon to depart the "fair" environs of ARRRI, as is my quiet colleague Animal Doug Holdway. As a consequence we have both relinquished our roles in organising the 1990 Congress planned for Jabiru. This double action caused just a little panic in the OSS ranks and Bob Fry's commitment to host the 1990 Congress was almost overturned. However, saner minds took control and a new committee has been constituted with Ross Hyne and Michael Mannion replacing myself and Doug. Thus, no one hidden in the far flung localities of southern Australia need worry - OSS (ARRRI) is striving to keep the commitment (given by Bob Fry and supported by Glen Riley) to hold the Congress. I feel sure that the new committee and ARRRI resources will win the day and 1990 will be a memorable meeting.

Due to an unfortunate stuff up over University Common Week dates the Congress is now scheduled for April. The alternative of July did not suit the "old" organising committee. If members feel this date is inappropriate then they could well approach the "new" cmmittee, but I feel I should add that the Executive Committee of ASL empowered the actual Congress organisers to select the most appropriate date. Our choice of April over July was based on the better opportunity to inspect the wetlands and the difficulty of competing with Mr, Mrs and kiddy Tourist during the peak tourist month of July, plus purely administrative and work load aspects that accumulate during July. However, the decision is no longer mine (nor Doug's).

To all ASL members I must point out that the little extra effort required to get to Jabiru (don't forget the sponsored travel arrangements) should be well worth it. Not only is Kakadu a wonderful place, but it has real applied limnological problems with many lessons for limnologists.

As a finale I'd like to thank the old Congress committee members for their support over the last year and wish the new committee all the success that ARRRI resources can muster.

Max Finlayson

Towards a Biological Council of Australia

Professor A.J. Wicken wrote the following letter to the Society canvassing support for a Biological Council of Australia. His proposal will be discussed by the executive, but is reproduced here for the information of members.

Dr R. Marchant
Secretary
Australian Society for Limnology
71 Victoria Crescent
Abbotsford Vic. 3067

Dear Dr Marchant,

Towards a Biological Council of Australia

In February of this year I was the convenor of a working party of biologists set up under the auspices of the Australian Institute of Biology Inc., to discuss how we, as biologists, might get our act together in terms of the changing scene in Canberra as to the funding and directions of science and technology. I am sure that you will agree that 'biology' is represented by far more professional and learned societies in Australia than probably any other scientific discipline - there are literally dozens of biological societies, some large and broad, some small and highly specialised. We have no coherent voice in circles that really matter, i.e. Canberra, and yet biology, in its broadest sense, is the most important area of science to Australia. As a trading nation, some 45% of our exports are biologically based. We can import overseas developments arising from research in the physical sciences and engineering but we have to solve our own biological problems in our particular part of the biosphere. Our environment is unique to Australia and many if not most of the problems associated with the effective management of that environment are also unique to Australia.

Thus it is of highest priority that we maintain a pool of highly-trained biological scientists if, as a nation, we are not only to preserve that which has presently been developed but also if we are to exploit the biological products of tomorrow. Australia has a large range of ecosystems, each is different and each has its own gene pool. We probably have understanding of only some 10% of our biological diversity and consequently we cannot yet fully identify the biological resources that potentially are available to us.

Basic biological research over the full range of the biological disciplines is essential to understanding and preserving our national heritage and to maintaining our ability to respond to threats to our community and environment. Biotechnology has been targeted by DITAC as a priority area for new industrial development. In order to capitalise on our existing strengths we must ensure a greater commitment to basic research in those disciplines which underpin biotechnology, such as molecular biology, biochemistry, genetics, cell biology and microbiology.

At the same time applied research into existing and potential problems that menace our biosphere must be regarded as a real national need. Eradication of the sheep blow-fly or the cattle-tick for instance is surely on a different scale of importance to the provision of a new radiotelescope. Understanding and effectively managing our substantial intact wilderness areas and utilising aboriginal knowledge of our flora and fauna surely outranks the social sciences and humanities in terms of national priorities.

To achieve most of all, or indeed any, of this demands a continuing supply of highly-skilled talented and energetic scientists. These will be our most important National asset and the source of our future competitiveness. We must recruit from the "brightest and the best" in the country and ensure that they are given the resources and conditions necessary to keep them here and maintain their innovative productivity. It is an investment that will pay enormous dividends and it is also an investment that the country cannot afford, for its future, not to make.

It was these considerations that prompted our working party to endeavour to set up a Biological Council of Australia that would, initially have four objectives:

to lobby Government and Industry to provide facilities for education and research in biology;

to promote all aspects of biological research,

to promote biological education in schools and the recruitment of biologists,

to improve communication between biological societies

Many of our societies are of course members of FASTS which has had some notable success in the lobbying of government. What we are suggesting is not in opposition to FASTS, rather we would work

with and through FASTS. I have had discussions with Dr David Widdup, Executive Director of FASTS, and, in his opinion, FASTS would welcome a Biological Council as FASTS recognises the difficulty of dealing rapidly with a broad range of biological societies. I would point out that there are already Mathematical and Earth Sciences Councils affiliated to FASTS. They are effective because they can make quick responses to issues. The Australian Institute of Biology Inc., which is a broadly based society covering the whole spectrum of biology, already has, in its constitution, the vehicle to set up such a Council. I am writing to you to ascertain your support (or otherwise) for such a venture.

Clearly there will be a cost involved and equally clearly the cost of our involvement, as a Council, with FASTS would have to be negotiated. At this stage, however, I would ask for your consideration as to possible involvement. I would envisage a meeting of representatives of interested societies later in the year to thoroughly discuss the issue. However, time is of the essence and if we are to so move it must be soon.

I hope to hear from you soon.

A.J. Wicken,
Professor and Dean

Book Reviews

Walton, D.W. and Houston, W.W.K. (eds) (1988). Zoological Catalogue of Australia. Vol. 6 Ephemeroptera, Megaloptera, Odonata, Plecoptera, Trichoptera. AGPS $29.95

(1) Reviewed by Professor W.D. Williams, University of Adelaide.

This is the sixth volume of the Zoological Catalogue of Australia to appear. Like all preceding volumes, it is an up-to-date compendium by the relevant experts of the taxonomic status of the group concerned. As such, it provides an absolutely essential reference for all serious taxonomists of the aquatic insect groups named, and is, besides, a very handy tool for non-taxonomists. Freshwater biologists will find it particularly handy as a reference text to the present state of our knowledge concerning some important aquatic insect groups.

Some 316 pages long, it provides the essential nomenclatural details of all individual species known thus far from Australia, as well as information upon geographical and ecological distribution, and important references in the literature.

All libraries will need to have this book. All serious students of the groups involved will need it also. Highly recommended for Australian limnologists!

(2) Reviewed by Dr. Leon Barmuta, Centre for Stream Ecology.

The Zoological Catalogue of Australia is one of the products of the Australian Biological Resources Study, and according to the Editorial Preface "is designed to serve as a bibliographic directory to the most comprehensive and recent information available on each species" (p. vii). This volume fulfils that objective admirably, with some of the most prominent taxonomists of each order as authors: I. Campbell (Ephemeroptera), G. Theischinger and W.W.K. Houston (Megaloptera), W.W.K. Houston and J.A.L. Watson (Odonata) F.B. Michaelis and C.M. Yule (Plecoptera) and A. Neboiss (Trichoptera).

Each order forms a chapter which is subdivided into sections devoted to each family. After a short introduction each section lists all currently valid genera and species alphabetically. The entry for each name documents references to the first publication of the name, location of types, previous name changes, synonomies and brief distributional and ecological information. As such the Catalogue is "just" a catalogue, and contains no new descriptions. Nevertheless it is a major achievement and the authors, editors and ABRS have done an excellent job, especially since this book represents just the

tip of an information iceberg: all the information in this volume resides on a computer database somewhere which (in theory) is being continually updated. Anyone who has fought with the muscle-building volumes of Zoological Record will appreciate how much easier life has suddenly become with the advent of this bit of technology.

Obviously, this book is of tremendous value to new or experienced taxonomists dealing with these orders, but the book goes beyond being a simple checklist. The introductions given by the authors are all concise, readable, and informative even for non-specialists; they usually contain a potted history of the group's taxonomy, mention important taxonomic, ecological studies and keys, and flag recent major shifts in taxonomic thinking. Consequently, benthic ecologists should find it invaluable for updating their dog-eared copies of Suter (1979), Williams (1980) and any unofficial (but often widely circulated) keys. Familiar south-eastern mayfly genera Atalonella and Atalophlebiodes, for example, are no longer supposed to exist in Australia, and this book tells us what to call them instead. A full index of all names is provided making the detective work very easy. I also spent an afternoon trying to find spelling errors in the entries and digging up long-dead names to try and catch the authors out. I failed; not that I'm a top-flight taxonomist in any of these groups but as far as I could tell everyone concerned has done their homework.

My only gripes are very minor. Taxonomy is being updated constantly, and there is a slim possibility that papers were published while this volume was being prepared. Michaelis and Yule explicity stated the "closing date" for information included in their chapter, and it would have been nice if everyone else had done so too. In addition, the most valuable aspect of this whole project is the rest of the iceberg of information. The Editorial Preface could have included a little more information on how to access the database for those of us who are end-users of taxonomists' expertise. Are there any plans to allow public access to the database? Can we do on-line searches for the latest names of a particular group? Questions that could probably be answered by writing to ABRS itself, although a couple of comments in the preface or including a flier with the book could do a lot to demistify ABRS and drag us luddites into the 20th century.

Computer wizzardry aside, this and other volumes of the catalogue are essential initial points of contact for specialists and neophytes alike. So be you taxonomist, pen-pusher, bug-picker, computer database nerd or just plain interested then you should buy this book. And at $29.95 for a well-produced hardcover of 316 pages, no lab or agency with even a passing interest in benthos should be without it.

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Williams, W.D. (1980). Australian Freshwater Life. (2nd edn). Macmillan, Melbourne.

Comment from the Australian Journal of Marine and Freshwater Research

In the February ASL Newsletter, one of your intrepid correspondents referred (mercifully, in prose not verse) to a paper which had been delayed by "a well known Australian journal". With combined feelings of paranoia and guilt, I ransacked my files, drew a blank, then phoned your correspondent. I was relieved to learn that the miscreant wasn't "the well known Australian journal" (namely AJMFR), nor any of the other CSIRO journals, but some other journal altogether.

As I spent some time at your last AGM talking about the disruption suffered during 1987-88 by AJMFR and other CSIRO journals, I feel your readers may have regarded us as prime suspects in the present case. I can assure you that AJMFR is back on course and hungry for papers.

Yours sincerely,

A. Grant
Managing Editor
Australian Journal of Marine and Freshwater Research

CSIRO: the unrecognised, unsung publisher, by Ian A.E. Bayley

The book "Limnology in Australia" edited by Bill Willians and Patrick de Deckker was, quite apart from its high scientific quality, superbly published and presented. In fact, it was awarded the Whitley Book Award of the Royal Zoological Society of New South Wales for the best book in 1986 in the "category of text". As a publisher, CSIRO played a key role in the excellence of this book. This fact was clearly recognized by the editors who were unstinting in their praise of CSIRO and its officers in the Editor's Preface; the outstanding contribution of Meredith Dobbie (Copy Editor), and the support given by Basil Walby and Lou Bennett were all fully acknowledged.

When the book was at an advanced stage the publisher , Junk of Dordrecht, was approached to become co-publisher . This was done in an endeavour to improve the distribution and availability of the book in Europe and North America. However, Junk really contributed nothing to the book other than to agree to have their name placed on it as co-publisher and to sell it.

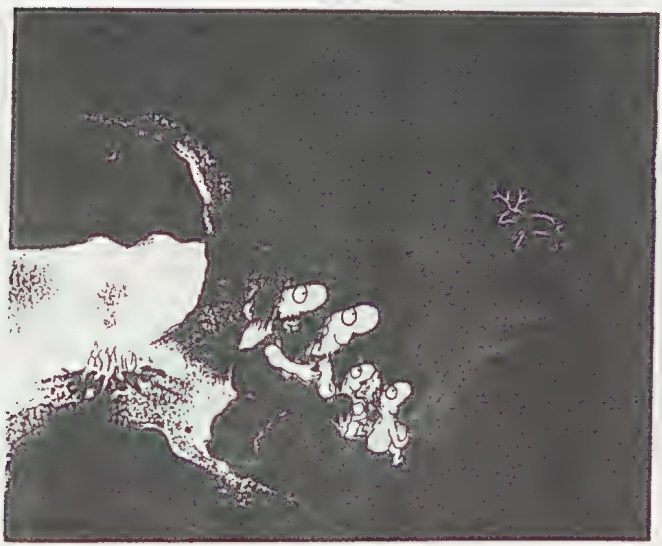
When the book was reviewed in Science [236, 1579-81 (1987)] it was referenced in such a way that Junk appeared as the sole publisher. This was a picture of things to come. Recently I have noticed a number of references to "Limnology in Australia" in overseas journals, and in all cases Junk was shown as the sole publisher! Why is this so? Although CSIRO is printed in bold on the title copyright pages (ahead of Junk) this may well be a meaningless acronym in most overseas countries whereas Junk (now Kluwer) is a well known publisher of books. With the benefit of hindsight I would say that CSIRO should have been

spelt out. In any event, it appears that with respect to publication Junk is getting all the overseas kudos for this thoroughly excellent book and CSIRO none. As a variation on an adage, one might say that CSIRO is a prophet with no honour in other countries! This, I believe, is most unfortunate. As we all know, CSIRO has been under strong attack (although some fiscal relief now seems likely) from a variety of quarters, especially political, for several years now, and outside the scientific community it hasn't even had much honour in its own country!

Next time you see a reference to "Limnology in Australia" in an overseas book or journal, check it out. Correctly I believe it should appear as follows:

> De Deckker, P. and Williams, W.D. (Eds) (1986) "Limnology in Australia". (CSIRO:Melbourne and W. Junk:Dordrecht.)

I note that the AJMFR has recently (vol. 39 but not 38) been omitting Junk, and I can see some justice and justification in that. However, if you spot an Australian source omitting CSIRO I'm not sure that I want to know about it - better that you should yell directly at the offender!



OBITUARY - DR PETER KILHAM

Dr Peter Kilham, renowned U.S. limnologist, died on a recent field trip to Kenya (March 20). This is a sad blow for limnology in general and Australia in particular because he had been offered and accepted a Visiting Professorship at the University of Adelaide for late in 1989. Peter was not familiar with Australian limnology, but was very familiar with the sort of habitats found in Australia (temporary waters, saline lakes, semi-arid localities, etc.). He and his wife had been looking forward with great interest to the intended visit. Dr Susan Kilham, also a well-known limnologist, would have accompanied him and wrote me recently: "Peter and I were very much looking forward to our visit to Australia - all the books we had read made it sound like a great adventure".

Peter was born in the U.K. in 1943 but was a citizen of the U.S. and had been domiciled there most of his life. He was educated at Dartmouth College but gained his PhD at Duke University, Durham. After postdoctoral experience at Woods Hole Oceanographic Institute, he joined the staff of the University of Michigan where he remained until his death. He was the recipient of many awards including most recently the Humboldt Prize awarded by the Max-Planck-Institute for Limnology. All of his publications were thoughtful and distinct contributions to the literature.

As a person, Peter was larger than life. His incisive mind, jovial spirit and warm personality endeared him to us all. He will be missed by the international scientific community. I will also miss a kindly man and a friend. Farewell, Peter; we shall all miss you; too bad you never made it to Oz after all.

W.D. Williams

Letter about America from New Caledonia

Bonjour dudes. I am scribbling this whilst sweltering next to a bus stop in some fairly impoverished outer suburb of Noumea. Several Trichoptologists of note told me I had to go have a look at the giant Helicopsyche larvae for which this island is famous. Unfortunately I know enough fractured French to have communicated my desire to see a creek to the Senegal-born bus driver, and he's left me here. Um...and it looks like a tropical version of the less salubrious reaches of the Torrens. So while I wait the next bus (and ultimately my plane home) I may as well update you all on 'Merrca.

As you doubtless know, LFA #2 was written by my choleric Evil Twin, who was last seen fleeing the country pursued by irate remote-sensors and their CIA sidekicks. I understand he is now incarcerated in the Columbian jungle and being forced to write glossaries of nested acronyms. Consequently, this communication returns to a saner level of discourse, induced perhaps by a recent trip East to what must be the closest thing to Shangri-La for ecologists: the IES.

IES stands for Institute for Ecosystem Studies, located near Millbrook, New York State and headed by Gene "Hubbard Brook" Likens. Situated on its own chunk of second-growth deciduous forest, the building houses a couple of dozen or more ecologists of just about every flavour you can think of: biogeochemists, microbial types, and every other sort of biologically-based ecologist. As well as a few Great Names, there are lots of graduate students (mostly from Cornell, and they don't know how lucky they are), visitors from OS, and a smattering of gaunt, worried postdocs wondering where their next job might be. 'Tis a worrying prospect for the future of ecology when even Cornell graduates have slim job prospects.

So what do they do and why does it warrant our attention here? What do they do? Hell, what don't they do? Hubbard Brook burbles on, David Strayer is a name all you hyporheic and meiofauna buffs should look out for, the good Dr Findlay continues to do neat and groovy things with microbes and organic matter, no lake is safe from the biogeochemical curiosity of a bevy of People in White Coats Standing Near Very Expensive Machines, and just about anybody with a yen for wet hands and waders is about to embark on a project on the Hudson River. There are several rooms of Very Expensive Machines, some of which seem to be disgorging gigabytes of information into silent computers alongside, although I admit one of these set-ups seemed to be non-operational with People In White Coats seething over it and five or six stout binders of instructions. My inexpensive ears detected expletives contaminating the atmosphere in the immediate vicinity.

However, Very Expensive Machines by themselves do not make for a fun or productive workplace. Somehow the Likens regime seems to have instilled a collaborative espirit du corps which rarely seems to obtain I guess there must be skeletons in the closet, and petty infighting, but it doesn't seem to get in the way of doing good science. During my visit I was subjected to polite

but rigourous questions by people who wanted to talk to me and, amongst the aquatic scientists at least, I detected a supportive and genuinely constructively critical atmosphere. Mind you I don't think people who fail to get grants would last very long in IES, but a combination of good facilities and a critical mass of compatible scientists makes for excellent opportunities to get one's own research off the ground.

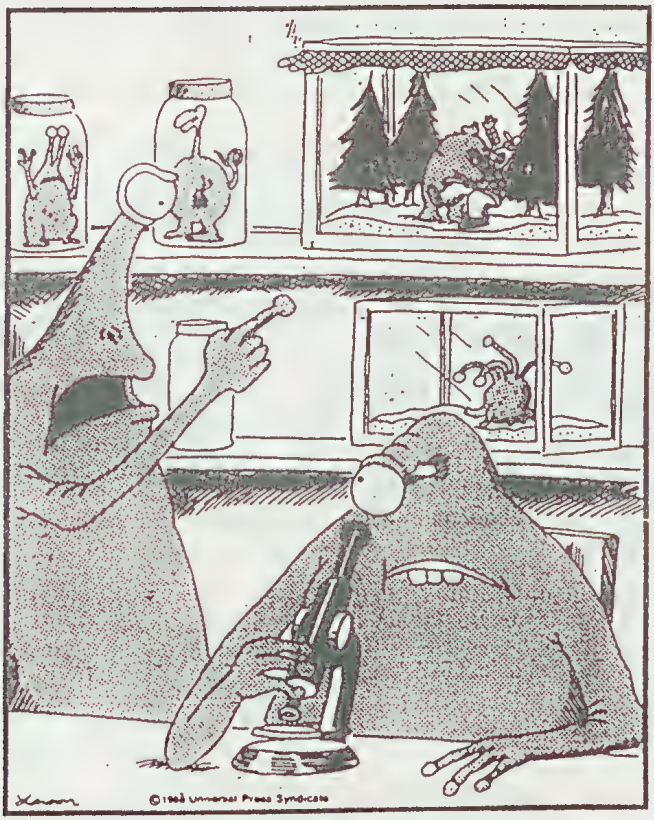
The reputation that some of the IES heavies have built up, of course, attracts many overseas luminaries (and not a few lesser freeloaders like myself) not the least of which was our own Professor Williams. For the record, his visit was remembered warmly and I was plied with donuts over morning tea in return for scurrilous gossip about the man. "Ha!", I thought, "So they are human after all." Naturally, I told them nothing. Well, nothing of any consequence. Oh yes, a number of persons interested in secondary production seemed to be howling for the blood of M. Kokkin and A. Davis, proving that Limnology in Australia was read by more people than the reviewers.

So Australia is still flavour of the month over here, and there are some folks who are interested in more than Da Baryer Reef. Perhaps it augurs well for the more enterprising Oz limnologists contemplating bi-continental collaborative work. If ARC won't fund us, perhaps NSF will. Worth a try I guess.

Meantime I await the little blue Noumea bus and contemplate life back in Osstraylia. I hear all the tertiary institutions are being amalgamated into the John Dawkins University of Australia. I can't wait.

Cheers,

Dr. Who.



"Zorak, you idiot! You've mixed incompatible species in the earth terrarium!"

STATE and TERRITORY AFFAIRS

Victoria

Correspondent: Richard Marchant, Museum of Victoria, 71 Victoria Crescent, Abbortsford, Vic 3067.

Here is the answer to the riddle in the last issue: What's the difference between a bulldozer and a chimpanzee? There's no difference they both
f--k up trees.

(I wonder whether this will get printed). Anyway, little else seems to have changed on the limnological scene since the last report. However I am pleased to say that Phil Mitchell (of La Trobe River fame) has returned to the fold, i.e. the Museum Survey Department, to work on the stream classification project. Also John Brittain made a quick visit to Melbourne from Albury to consult various people who might in the fullness of time if given gentle prods and plenty of liquid refreshment put names to some of his beasts. He is back in Australia briefly (for 1 month) from Norway to complete his life history work on some of the benthic invertebrates below th Dartmouth Dam. He gave a seminar for the Centre of Stream Ecology at CIT on river regulation and mayflies.

More of this sort of rubbish next issue

Western Australia

Correspondents: Shirley Balla and Fiona Whittles B.E.S., Murdoch University, Murdoch 6150, W.A.

Firstly we must congratulate Jenny on the arrival of J.D. junior in March. His visits to the wetlands lab at Murdoch have raised the intellectual level of conversation to"Ooh isn't he cute, isn't he tiny, dosen't he look like Winston Churchill, hasn't he grown since yesterday" and other such baby-induced (non-gender specific) drivel. Another (possibly equally cute?) addition to the wetlands team is Faye Christidis who will be working with Fiona and Jenny on the Megawetlands classification study.

Leon Barmuta paid us a visit with interesting tales and phrases from the U.S.A. (Shakadoo Dr.Who!). Several people to whom Leon was merely a legend were finally able to put a face (and earing) to the name.

We were also blessed with a fleeting visit from Australia's own Grandfather of Limnology, Bill Williams. He generally enlightened members of the wetlands group (particularly regarding water quality in Adelaide) and was the topic of conversation for at least a week.

His local counterpart with respect to Estuarine Biology, Ian Potter, having only recently returned from South Africa has departed for sunny Spain. His story this time is a"Satellite Symposium on Lampreys" and he's sticking to it, then onward to the Maldives and the Solomon Islands in October (with no apparent excuse), ...sigh.

Northern Territory

Correspondent : Max Finlayson, ARRRI, Jabiru, NT.

The northern wet season has finally drawn to a close but the mental madness syndrome has not abated. Now that the controversy over water releases and the verbal lunges of the Northern Land Council versus Ranger Uranium Mines court case (who won what?) have subsided the ARRRI has had time to take stock of its resources. Those who read to job section of the Weekend Australian will have seen adverts out for both the Director and Deputy Director jobs, this has come about due to Glen Riley bolting south to the OSS Sydney office and Vince Brown going on leave pending retirement and returning to England (a nice place I believe!). In addition to myself going to the IWRB we have also lost Helen Allison to the EPA in Perth and the quietly spoken Thug Holdway is joining the Key Centre for Applied and Nutritional Toxicology at RMIT. The "Vote with your feet" approach has also made an impact on one of the non-limnological groups.

The remaining limnological research effort is being borne by the biomonitoring group, unfortunately as Keith Bishop is counting fish down near Coronation Hill and Chris Humphrey is attempting to educate a mob of Park Bears there is no up to date news.

You should read elsewhere in this newsletter an update on the April 1990 Congress in Jabiru being orgainsed by Ross Hyne - hope to see you there.

South Australia

Correspondents: Andrew Boulton and Lance LLoyd, Dept. of Zoology, University of Adelaide, GPO Box 498, Adelaide 5001.

Well, the streams are beginning to flow again and the limnos are emerging from their over-summering refuges. Bill Williams returned briefly from World Tour #1 to gloat over the filling of Lake Torrens and other inland ephemerals before getting ready for WT#2. His protege Bob Taaffe has entered Stratiomyid-mode and at last count could recognise some ten species (taxa?)- bad news for all those ecologists.

Mike Geddes visited Queensland to capture some fabled sun and check out the yabbie aquaculture but suceeded in breaking the drought there and tried to dam an intermittent stream with his station wagon. At the last "Limno-lunch", he presented an interesting talk about aquaculture Queensland-style. The yabby group at Adelaide is gaining impetus with the appointment of a Senior Research Officer, Martin Smallridge, who is studying yabby production and growth under various regimes of shelter and food while Richard Musgrove, a PhD student, is looking at energy budgets and nutrition of juvenile yabbies. An Honours student Nick Campbell is examining the population genetics of the controversial *Cherax albidus/destructor* complex in South Australia using electrophoretic and morphometric techniques.

Other limno Honours students in the Zoology Department include Adrian Stokes who is looking at the ingestion of lead shot by ducks in several S.A. swamps, Steve Parker who is using the contents of Aboriginal middens along the River Murray to get an idea of pre-impoundment riverine communities and Shane Brooks who is manipulating disturbance frequency and sub-stream particle size of patches of river bottom to see how benthic invertebrates respond over different time scales. We will give you details of the botanical Honours projects in the next exciting episode...

Alice Wells and Phil Suter have returned safely from another smash-and-grab raid at Kakadu despite a couple of hair raising adventures in a helicopter running out of oil. Phil is presently assessing the results of a comparison between two methods of de-stratifying Myponga reservoir (aeration vs mechanomixis) and is about to resume survey work on invertebrates colonizing artificial substrate in the Finniss River.

In early April E&WS held a sucessful symposium at Bolivar (not Bolivia!) on toxic algae in freshwaters; interesting papers on cyanobacteria and other goodies were presented by George Ganf, Mike Burch and Ian Falconer. Chris Madden presented a talk at the Aus. Ent. Soc. in Sydney on his laboratory studies on pesticide-induced deformities in Chironomid larvae. It seems that the ecologist's bane is useful for something after all!!

New South Wales

Correspondent: John Harris, Fisheries Research Institute, PO Box 21, Cronulla NSW 2230.

The limnological strength of the Sydney region will soon be boosted by one much-needed member, with the return of Keith Bishop. Keith has been working with OSS at Jabiru for a number of years, where he recently completed his doctorate on work with the fascinating fish communities of the Kakadu streams. On the debit side (taking the charitable view!), Richard Tilzey has swapped disciplines to work in Canberra with the Bureau of Rural Resources, helping to manage Commonwealth-controlled marine fisheries.

In March, Professor Patrick Sorgeloos (University of Ghent, Belgium) presented one of a series of workshops on Artemia at the Brackish Water Fish Culture Research Station (Port Stephens). Many of the 30 or so participants left feeling greatly enlightened about the use of brine shrimp in aquaculture, and other cultured zooplankton, notably rotifers.

Dr Peter Getuke recently completed his first year as the senior scientist at the Inland Fisheries Research Station, Narrandera. His work revolves around the ecology of native fish in inland river systems, and includes some interesting eco-physiological studies of fish larvae. A main objective is to develop a functional model relating fish population dynamics and river flow management.

The Cowilla debate has progressed; Bryan Pierce of Adelaide, has been contracted by the Murray-Darling Basin Commission to make a brief study of the ecological implications of this salinity-control project for the River Murray

NSW may have been a little slow to plunge into biomonitoring of rivers, but the Electricity Comission is now considering funding a study to look at the impact of the Wallerawong Power Station on the ecology of the Coxs River. Initially it will be a short term study emphasising macroinvertebrate community analysis.

South-East Queensland

Correspondents: Stuart Bunn and Brad Pusey, Division of Australian Environmental Studies, Griffith University, Nathan, Qld, 4122.

The news from south-east Queensland is rain, floods, more rain, more floods and EVEN MORE !****$$$$!!! RAIN. For those of you in the less moist regions of the world's driest inhabited continent, particularly those with an avid interest in precipitation, Brisbane had 547 mm of rain in April and even more in January, February, March and May. In fact, on average it has rained every second day this year - so much for the Sunshine State! As a result, this month we have experienced the worst flooding since 1974 (when Brisbane was washed into Moreton Bay), which is also what they said last month and in April 1988.

Prof Calvin Rose's (CCISR) attempts to model sediment movement and runoff in a steep sub-catchment failed to predict the bulk transport of several million tons of what used to be a hill-side of pineapples. He is likely to apply for funding from AWRAC next year to model the fluvial transport of bromeliads in south-east Queensland. Other casualties included Jane Hughes' (GU) swimming pools/experimental ponds which were situated some 10 m above the Brisbane River when installed in March, but which subsequently demonstrated substantial vertical, lateral and longitudinal displacement. Others of us, more fortunate, have done little else but stare wistfully through fogged windows and wait for the local authorities to rebuild the roads into our study sites. Well, that's our excuse anyway!

April has also seen a flood of new staff to join the swelling ranks of CCISR, viz Terry Flanders and Jan McLean (late of Heron Island and currently employed on the ARtificial Stream Ecosystems Study), and Dr David Charles-Edwards (Coordinator of the CCISR clearing house). Other new arrivals at Griffith University include Ngaire Phillips, who has recently commenced her PhD with Jane Hughes. Although now an oyster-grinder (for electrophoretic reasons), she does have fresher affiliations through the New Zealand Society for Limnology.

CCISR recently hosted two AWRAC Summer Research Scholars. Mark Kennard successfully completed his study on the effect of habitat disturbance on the feeding ecology of freshwater fishes in North Pine Dam, with Dave Bluhdorn. Shane Duffey studied methods for determining sediment settling velocities with Prof Calvin Rose and Dr Hossein Ghadiri. The successful implement used (the Manifold Bottom Withdrawal Tube) is now available in three sizes (small, medium and South Australian) and five flavours.

Few visitors have drifted this way since our last newsletter. Peter Cranston recently dropped in for tea and cakes at Angela's after a hectic tour of the NT and FNQ. He inadvertently agreed to identify all of our chironomids while choking on his third chocolate eclair. Neil Loneragan (Murdoch) turned up on our doorstep again on his way to somewhere sunnier.

The traffic out of here has been somewhat more congested. Stuart Bunn spent January at the University of Waterloo trying to finish off some post-doctoral work. He later met with Brad Pusey and Angela Arthington in Melbourne, for discussions with members of the Centre for Stream Ecology and Centre for Environmental Applied Hydrology. We wish to thank Barry Hart, Tom McMahon and other colleagues for what proved to be a fruitful and most enjoyable visit. Dave Bluhdorn (a confessed Tilapian) is currently visiting Tilapia haunts in Scotland, Bangkok?, Tokyo? and Colombo? All this for a fish of dubious culinary value. Peter Mather (QUT) is soon to depart for Singapore, supposedly to attend a conference on aquaculture. Anyone wishing to place their orders for limnological equipment, such as cameras, watches and jewelry, had best do so quickly.

Finally, we throw down the gauntlet to certain State correspondents who failed to show sufficient wit and acerbity to respond to our barbed comments of the November 1988 newsletter. Poor show chaps! A few invertebrate comments from our insular colleagues hardly suffices. What do you expect from people who have difficulty electing their own government? We were led to believe that this newsletter is ASL's vehicle for informed comment, poetry, uninformed insults and random sniping. Lift your game or we will taunt you a second time!

LOOK AT ALL THOSE INSECTS SWARMING AROUND THE LIGHT...
...IT SEEMS A WASTE THAT NATURE ATTRACTS THEM TO THE LIGHT ONLY TO DIE.
DON'T KNOCK 'NATURE' MATE. SHE KNOWS WHAT SHE'S DOING!

Tasmania

Correspondent: Jean Jackson, Dept. of Zoology, University of Tasmania, GPO Box 252C, Hobart, 7001.

Not much hot news from Tassie this time, as most limnos put on another jumper and prepare for a long cold winter. A quick dig for gossip revealed that lots of projects are winding down: at Inland Fisheries Andrew Sanger is finishing the WWF project on endangered galaxiids; Stuart Chilcott has given up battling the effects of log trucks on his drawings and is allowing his masters to stagnate while he and Wayne Fulton write up this years World Heritage Area report on lake rock fauna for Lands, Parks and Wildlife: Even Peter Davies' leakey project on Derwent River Nasties is ending.

Peter has recently returned from his trend-setting trip to the US where he did courses on instream flow requirements for fauna; he keeps himself busy here with the ongoing pesticides in streams project, an AWRAC funded study of juvenile trout in East Coast Streams, and work on Forestry practices and fish populations.

In the Zoo. Dept. the only limno Honours student (Henry Maxwell) is writing up his thesis on the microdistribution and feeding ecology of eusthenid stonefly nymphs. Alistair Richardson and Roy Swain have Tom Krasnicki (who has defected to marine studies) electrophoresing *Parasticoides* and *Anaspides* for them, for Alistair's revision of *Parasticoides* and to help Roy sort out the putative species of *Anaspides* . A spate in Warra Creek taught Mark Nelson and Alistair a lesson about anchoring litter bags, by leaving them high and dry in trees. The department has a pleasant smell of gum leaves as Mark sorts samples day in day out.

Stefan Eberhard's survey of cave fauna is in full swing with many new discoveries including a new genus of troglobitic hydrobiid and a cave dwelling amphipod from Precipitous Bluff caves (almost quarried for limestone last decade); Psammaspididae from Mt. Ronald Cross; all sorts of animals from Franklin River caves including the first record of cave dwelling *Parasticoides* sp. indet. (juveniles); and a breeding population of *Astacopsis gouldi* in Gunns Plains Caves. Some unfortunate discoveries are caves that have suffered a radical alteration of hydrological regime (probably due to the conversion of forest to pasture), resulting in siltation , severe flooding and perennial streams becoming intermittent. In the absence of baseline information, effects on the cave fauna can only be postulated. The first recorded Stygocaridae (Syncarida) from

Tasmania (previously known from Vic, NZ and South America) was collected by Stefan during a survey of *Sphagnum* bog fauna, carried out last year for the Tas. Conservation Trust (National Estate funding body).

"Nasty Pierre" Horwitz is surveying the aquatic fauna of swamps near the lower Gordon River for Lands, Parks and Wildlife. These swamps are in closed canopy rainforest and are in danger of draining if the riverbanks are breached by erosion caused by wash from tourist boats.

Don Steele from St. Johns University, Newfoundland, has been visiting Tasmania to work with Syncarids.

Another limnologist has been delivered a bundle of joy! Premek Hamr apparently was partly responsible for young Benedikt arriving a few days ago. Congratulations!

PACIFIC SCIENCE ASSOCIATION

VI INTER CONGRESS

VALPARAISO, Vina del Mar, CHILE, AUGUST 7-10, 1989

THE PACIFIC, BRIDGE OR BARRIER?

The VI Inter Congress of the Pacific Science Association, have a special interest in Freshwater Science at the next meeting in Chile. In this opportunity, themes on limnology will be specially analysed which are of the most interest to the countries in the Pacific Basin. For this reason, within the Inter Congress are the Section of Freshwater Science. In sessions of that section the following themes will be treated:

1. Comparative limnological studies in lakes and rivers in the Pacific Basin.

2. Productivity in lakes and rivers.

3. Eutrophication and contamination in lakes and rivers.

4. Fish biology and fisheries in lakes and rivers.

5. Biogeographic studies between lakes and rivers around the Pacific Ocean as a barrier to freshwater biota or as a dispersion way?

We are very interested in your participation. If you participate in the 24th Congress of the SIL on theoretical and applied limnology in August 13-19 in Munich, you visit first Chile and then continue to Germany.

Professor. Dr Hugo Campos,
Convenor of Freshwater Science,
Instituto de Zoologia,
Universidad Austral de Chile,
P.O. Box 567, Valdivia, Chile

XVII PACIFIC SCIENCE CONGRESS (Hawaii, May 1991)

The XVII Pacific Science Congress will be held in Hawaii in May 1991. Five themes are beimg planned (Annex):

* Global Environmental Change - Pacific Aspects

* Population, Society and Health

* Biological Diversity

*Science and Culture

* Emerging Technologies and Environments

The Convenor of the Freshwater Sciences Committee invites Freshwater Scientists from Australia to organise special symposia in relation to these themes. Please could interested parties contact the convenor so that the relevant theme organisers can be informed.

Dr. Jose I dos R Fortado
Convenor, Freshwater Sciences Committee,
Pacific Sciences Association,
Centre for Integrated Development,
19 Langford Green,Champion Hill,
London SE5 8BX
England, U.K..

PACIFIC SCIENCE ASSOCIATION

Plans for the Hawaii Congress in May 1991

As this is written the Congress is only about 2 1/2 years away. It is not surprising therefore, that the intensity of planning for it has increased. World leaders in Science and Technology are being approached to give plenary addresses that relate to the five major symposium themes. These themes are: Global Environmental Change--Pacific Aspects, Population, Society and Health, Biological Diversity, Science and Culture, and Emerging Technologies and Environments.

Scientific committees are being asked to take on the organization of sub-themes under those various headings; the Coral Reef committee will have a spot in Global Environmental Changes and the Botany committee will prominently participate in the events of the Symposium on Biodiversity, to give only some examples of the Scientific committee inputs that are being arranged.

Given that the organization of the Symposium sub-themes must still allow for flexibility, we present here, albeit not yet complete, some tentative details about the various symposium components. Aside from Coral Reefs, the Global Change Symposium will stress Aspects of Ocean Productivity, Atmosphere-Ocean Interactions and Sea Level Rise in a more general fashion. There is also intent to approach the Fresh Water Sciences committee for a contribution on Run-off regimes and their modifications. The Biodiversity Symposium theme will include the Conservation of Natural Areas, writ large, the Restoration of Diversity in the Biosphere and Genetic Aspects of Diversity in Pacific Human Populations. In the Symposium on Science and Culture one set of sub-themes will deal with the interaction of the various cultures in the Asia/Pacific realm, with the now universal aspects of Science and Technology, while the other, yet related set of subthemes, will try and come to grips with formulation and influences of Science and Technology Policies in various nations.

Emerging Technologies and Environments will include emphasis on aspects of the social and of the natural world with some subthemes targeted to highlight Biotechnologies, e.g., techniques to enhance food and fiber production processes; this will include, but not be dominated by, gene technologies. This symposium will also address Information and Communication, stressing computers and problems of language, thus we anticipate strong Chinese and Japanese participation here. There will be a subtheme on energy with emphasis on its diversification and conservation in the future. Subthemes on Space, e.g., satellites and the exploration of the earth, and Ocean Technologies will also be organized.

In Population, Society and Health, one of the major themes will be focused on Changing Risk Patterns with sessions on the Environmental Risk Transition, as well as the Demographic and Epidemiological Transitions. There will be a subtheme on the Changing role of Women in the Region as well as on Human Health Effects of Global Environmental Change. Finally, the planners of this set of meetings have thought of including a session on Biotechnology and Health with a vista into the next century.

Professor Joe Morgan and his assistants are busy in preparing a set of field trips throughout the Hawaiian Islands about which we will give more detail later.

LIMNOLOGY BIBLIOGRAPHY

In Russ Tait's absence, the limnology bibliography will be collated by Russ Shiel, Murray-Darling Freshwater Research Centre, P.O. Box 921, Albury N.S.W. 2640. Please send publication details for inclusion as per previous A.S.L. Newsletters.

The full bibliography has been converted to ASCII and is available in its entirety (starting 1981). If you want a copy (either disk or printout) let me know. If you send your own disk, specify format (ASCII, DW3/4, Word, Word Perfect etc.)

1986:

Hawking, J.H. Dragonfly larvae of the River Murray system. A preliminary guide to the identification of known final instar odonate larvae of south-eastern Australia. *Tech. Rept* 6, 1-65. AWDC, Albury.

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Blackburn, S.I. & Tyler, P.A. On the nature of eclectic species - a tiered approach to sexual and genetic compatibility in the desmid *Micrasterias thomasiana* Archer. *Brit. Phycol. J.* 22, 277-298.

Croome, R.L. & Tyler, P.A. *Procentrum playfairi* and *Procentrum foveolata*, two new dinoflagellates from Australian freshwaters. *Brit. Phycol. J.* 22, 67-75.

1988:

Bowling, L. C. Optical properties, nutrients, and phytoplankton of freshwater coastal dune lakes in south-east Queensland. *Aust. J. Mar. Freshwat. Res.* 39, 805-815.

Bunn, S.E. Life histories of some benthic invertebrates from streams of the northern jarrah forest, Western Australia. *Aust. J. Mar. Freshwat. Res.* 39, 785-804.

Cosser, P.R. Macroinvertebrate community structure and chemistry of an organically polluted creek in south-east Queensland. *Aust. J. Mar. Freshwat. Res.* 39, 671-683.

Gehrke, P. Acute cardio-respiratory responses of spangled perch, *Leiopotherapon unicolor* (Günther, 1859), to sublethal concentrations of zinc, temephos and 2,4,-D. *Aust. J. Mar. Freshwat. Res.* 39, 767-774.

Koste, W., Shiel, R.J., & Tan, L.W. New rotifers (Rotifera) from Tasmania. *Trans. R. Soc. S. Aust.* 112, 119-131.

Marchant, R. Vertical distribution of benthic invertebrates in the bed of the Thompson River, Victoria. *Aust. J. Mar. Freshwat. Res.* 39, 775-784.

McBride, T.P. Preparing random distributions of diatom valves on microscope slides. *Limnol. Oceanogr.* 33, 1627-1629

Wrigley, T.J., Chambers, J.M. & McComb, A.J. Nutrient and gilvin levels in waters of coastal-plain wetlands in an agricultural area of Western Australia. *Aust. J. Mar. Freshwat. Res.* 39, 685-694.

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Ling, H.U., Thomas, D.P. & Tyler, P.A. Microalgae. *In* W. Zeidler & W.F. Ponder (Eds) *Natural History of Dalhousie Springs*. South Aust. Mus. Spec. Publ.: 47-52.

COMING EVENTS

1989

6-9 JULY International Symposium "Wetland and River Corridor Management" Contact: Jon Kusler, Assn. of State Wetland Managers, Box 2463, Berne, NY 12023, USA. tel (518) 872-1804.

7-10 JULY ASL 28th Congress and AGM Canberra CAE, Belconnen ACT. Contact: Dr R. Norris, Water Research Centre, School of Applied Science. CCAE, PO Box 1, Belconnen ACT 2616.

8-11 AUG Symposium "Biomanipulation-Tool for Water Management" Artis Zoo, Amsterdam, The Netherlands. Details from:- Convention Bureau,PO Box 1558, 6501 BN Nijmegen, The Netherlands.

6-10 AUG The Finnish Limnological Society presents a symposium titled "The Dynamics and Use of Lacustrine Ecosystems" Contact: Ms Kati Tyystjarvi, Finnish Science Centre Foundation, PO Box 166, SF-01301, TAA, Finland. PH: 358 0 85799, Fax 358 0 873 4142.

6-10 AUG International Society for Ecological Modelling (ISEM) North America Annual Meeting. Contact: Dr. Efraim Halfon, National Water Research Institute, Canada Centre for Inland Waters, Burlington, Ontario, Canada L7R 4A6.

7-10. AUG Pacific Science Association VI Inter Congress.Valparaiso, Vina del Mar, Chile. Contact: Prof. Dr. Hugo de Campos, Instituto de Zoologia, Universidad Austral de Chile, PO Box 567, Valdivia, Chile.

31 AUG-6 SEP Vth International Symposium on Paleolimnology. Contact Prof.Frank Oldfield, Geography Dept.,Univ of Liverpool,PO Box 147,Liverpool L69 3BX, UK.

11-16 SEP 6th International Symposium on Trichoptera, Lodz and Zokopane, Poland. Registration is before 30 Sept. 1988. For forms and other information contact Dr A. Nebois, Dept. Entomology, Museum of Victoria, 71 Victoria Crescent, Abbotsford, Victoria, 3067. Ph 419 5200

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20-23 APRIL ASL 29th Congresss and AGM, Jabiru NT, and Pre-Congress Symposium on the 11th "Water Management in the Alligator Rivers Region". Enquiries: Isabell von Oertzen tel: (089) 792 300, Fax (089) 792 076, Telex 85457.

2-7 JULY International Crustacean Conference, Brisbane, Australia. Contact:- Crustacean Conference Secretariat,Uniquest Limited, University of Queensland, St Lucia, Qld,4067.Ph (07) 377 2733, Fax (07) 870 3313

29 JULY-3 AUG International Association on Water Pollution Research and Control (IAWPRC) Biennial'90.Contact: Anthony Milburn, Executive Director, IAWPRC, 1 Queens Anne's Gate, London, SW1 H9BT, England. Ph:441 222 3848, Fax: 441 222 1818.

23-30 AUGUST V International Congress of Ecology "Development of Ecological Perspectives for the 21st Century", Yokohama, Japan. Contact: Secretary General's Office for Intecol 1990, Institute of Environmental Science and Technology, Yokohama National University, Yokohama 240, Japan.

5-8 SEP 1Vth International Conference on the Conservation and Management of Lakes "Hangzou'90". Hangzou, The People's Republic of China. Contact: Mr. Zhang Yuitan, Foreign Affairs Office, Chinese Research Academy of Environmental Sciences Beiyuan, Anwai, Beijing, People's Republic of China. Ph: 4211025, Cable: 1064, Telex: 22505 Booth CN.

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MAY XVII Pacific Science Congress, Hawaii. Contact: Dr. Jose Ireneu dos Remedios Furtado, Centre for Integrated Development, 19, Langford Green, Champion Hill, London SE5 8BX, England, UK. Ph (01) 733 8523, Fax (01) 299 0197.

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